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Contingency Contractor Optimization Phase 3, Third-Party Software List – Contingency Contractor Optimization Tool - Prototype

Justin D. Durfee, Christopher R. Frazier, Alisa Bandlow

Prepared by
Sandia National Laboratories
Albuquerque, New Mexico 87185 and Livermore, California 94550

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Justin D. Durfee, Christopher R. Frazier, Alisa Bandlow
Operations Research and Computational Analysis
Sandia National Laboratories
P.O. Box 5800
Albuquerque, New Mexico 87185-MS1138

Abstract

The Contingency Contractor Optimization Tool – Prototype (CCOT-P) requires several third-party software packages. These are documented below for each of the CCOT-P elements: client, web server, database server, solver, web application and polling application.

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1. SCOPE

The Contingency Contractor Optimization Tool – Prototype (CCOT-P) requires several third-party software packages. These are documented below for each of the CCOT-P elements.

2. CLIENT

JavaScript must be enabled for the site as a client connects through a browser to the CCOT-P web application and receives a JavaScript which runs in the context of the browser. The CCOT-P web application is designed to be run under Firefox (minimum version 17.0). Internet Explorer, Chrome, or Safari may also be used, though there may be slight differences in appearance and user interaction.

Firefox legal notices: <http://www.mozilla.org/en-US/about/legal.html>

3. WEB SERVER

The requirements for the web server are as follows:

- Conform to Java Servlet and Java Server Pages container technologies (be able to host Java Servlet .war files)
- Pass authentication through to the web application
- Run the CCOT-P application in a directory *other than the web root*. (It should have an address such as <https://server/CCOT>, not <https://server/>.)

Apache Tomcat 7.0 is used in the OUSD(AT&L) eBusiness Center's deployment on the web server. Apache Tomcat 8.0 is used in the Sandia National Laboratories deployment of the web server. Both are released under Apache License, Version 2.0: <http://www.apache.org/licenses/>.

Tomcat using Java Runtime Environment 7 (Java license: <http://www.oracle.com/technetwork/java/javase/terms/license/index.html>) is used for the Sandia National Labs and eBusiness Center's deployment.

Depending on the server configuration, additional software (Microsoft IIS, Waffle, etc.) may be required to handle web server authentication.

4. DATABASE SERVER

CCOT-P uses a Microsoft SQL Server database, version 2008 or later. This is a commercial product which must be installed and requires a license.

5. SOLVER

The CCOT-P Solver provides a simple Java Remote Method Invocation (RMI) server used to invoke the CPLEX solver to solve linear programs created by the CCOT web application.

- Developed by Sandia National Laboratories.
- If installed as a Windows service, uses Apache Commons Procrun:
<http://www.apache.org/licenses/LICENSE-2.0>
- Uses Java Runtime Environment v7. Java license:
<http://www.oracle.com/technetwork/java/javase/terms/license/index.html>

6. CCOT-P WEB APPLICATION

The CCOT-P web application uses several third party libraries. The application is compiled with JDK7, and typically runs under the Java Virtual Machine of the Web Server.

- User Interface
 - Google Web Toolkit (GWT) v2.5.1. License:
<http://www.gwtproject.org/terms.html>
 - GWT Chart Tools (Visualization) v1.0.2
 - Sencha GXT, versions 2.2 and 3.0. (<https://www.sencha.com/products/gxt/>)
 - GWT Upload v1.0.1 (<https://code.google.com/archive/p/gwtupload/>)
- Database
 - Hibernate 4.2 (license: <http://www.hibernate.org/license>)
 - Other required libraries:
 - jboss-logging-3.1.0.GA.jar
 - jboss-transaction-api_1.1_spec-1.0.1.Final.jar
 - Java Assist 3.18.1-GA (<http://www.gnu.org/licenses/old-licenses/lgpl-2.1.html>)
 - Antlr 2.7.7 (<http://wwwantlr.org/license.html>)
 - Apache Commons Collection Framework 3.1 (<http://www.apache.org/licenses/>)
 - Java Transaction API 1.1 (http://download.oracle.com/otn-pub/java/licenses/java_ee_sdk-6u2-nojdk-oth-JPR_license_1.html)
 - DOM4j (<http://dom4j.sourceforge.net/license.html>)
 - sqljdbc41 (for SQL Server database dialect): download required
- Microsoft Excel Import/Export/Processing
 - Apache POI (license: <http://www.apache.org/licenses/LICENSE-2.0>)
 - Other required libraries:
 - Apache Commons Logging 1.1.3 (<http://www.apache.org/licenses/>)
 - Apache Commons Codec 1.9 (<http://www.apache.org/licenses/>)
 - Log4j 1.2.17 (<http://www.apache.org/licenses/>)
 - xmlbeans-2.6.0 (<http://www.apache.org/licenses/LICENSE-2.0.html>)
- Other Apache Commons Libraries (<http://www.apache.org/licenses/>)
 - Beanutils 1.8.3
 - Collections 3.1

- FileUpload 1.2.2
 - Logging 1.1.1
- JUnit 4 (unit testing, license: <https://github.com/junit-team/junit/blob/master/LICENSE.txt>)
- Simple Logging Facade for Java (SLF4J) v1.7.12 (license: <http://www.slf4j.org/license.html>)

7. CCOT-P POLLING APPLICATION

The Polling Application requires two third-party applications:

- If installed as a Windows service, use Apache Commons Procrun (<http://www.apache.org/licenses/LICENSE-2.0>).
- If it polls a SQL Server database, sqljdbc41.jar (for SQL Server database dialect) needs to be downloaded by customer (free). (<http://www.microsoft.com/en-us/download/details.aspx?displaylang=en&id=11774>)

DISTRIBUTION

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